ABSTRACT

A microtool for embossing structures into a substrate is fastened to an object, such as a press plate, by sintering, preferably pressure sintering. An insight underlying the invention is the fact that such a sintering or pressure sintering method provides a sufficiently reliable, strong, heat conducting and/or dimensionally stable connection, even for a hot embossing process, where at elevated temperatures, pressures of 10-300 bar and tensile forces of up to 100-200 bar may act upon the connection, and where a dimensional stability of down to the micrometer scale may be required. According to a preferred embodiment, the forming temperature of a pressure sintered connection equals the embossing temperature, i.e. the working temperature of the tool.